

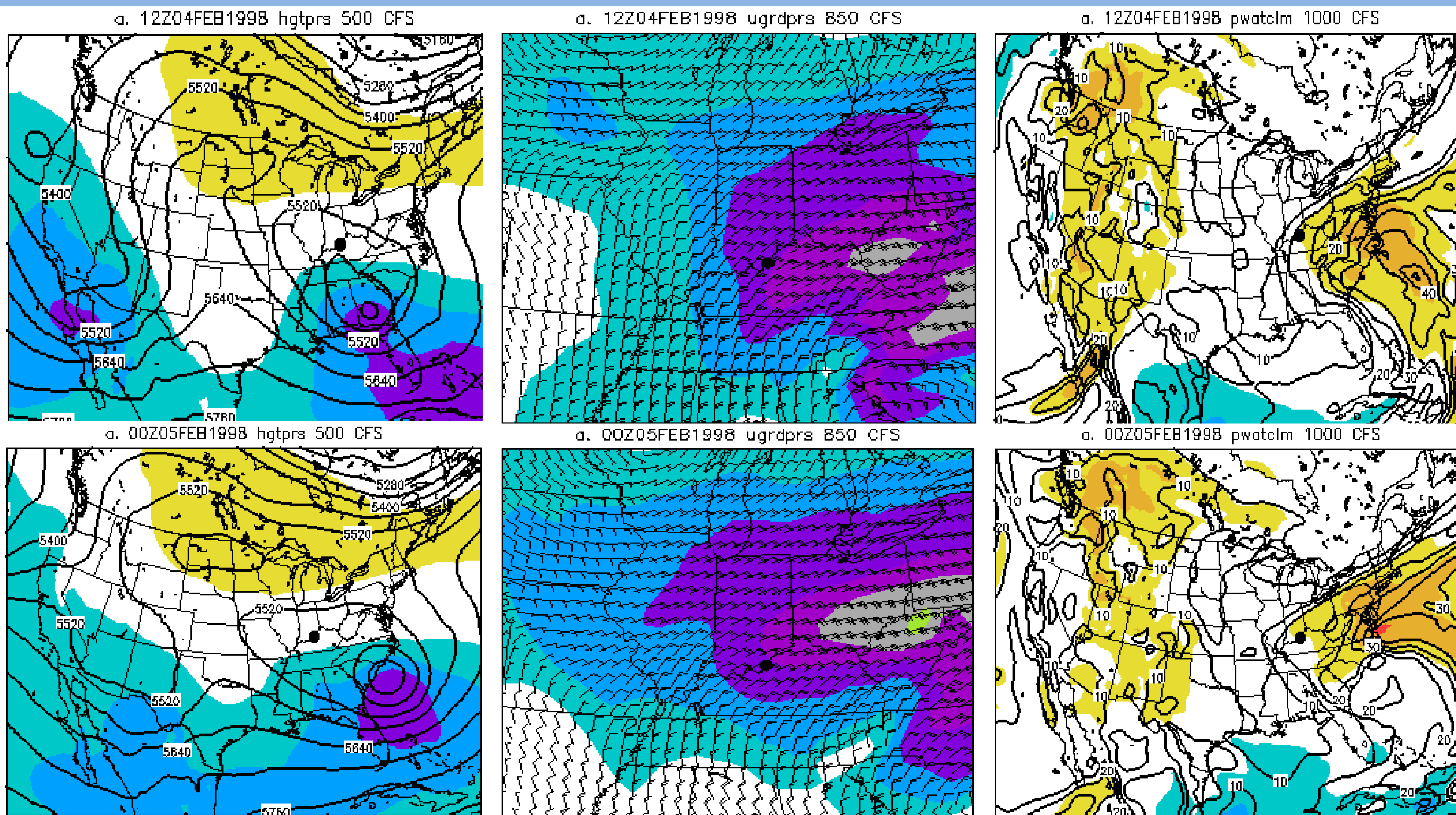
FEBRUARY 3-6, 1998

KENTUCKY SNOWSTORM



Members of the National Guard help clear a roadway of fallen trees near Mount Vernon, KY. Courtesy of David Stephenson, Herald-Leader.

A four-day snow event that set snowfall records across Kentucky in February 1998 came as a surprise to many people, including some meteorologists due to an anomalous weather pattern. The reason this set-up was unusual was the fact that 1997-1998 was considered a strong El Nino year, which generally means drier conditions for the Ohio Valley and wetter in the Southeast. Heavy, wet snow spread east to west starting on the night of February 3 and continued into the morning of the 6th, only letting up occasionally during that time frame. It caused millions of dollars in damage, mainly from downed trees and power lines, and left some people in central Kentucky without power for a week or more.



500 mb heights (left), 850 mb winds (middle), and 1000 mb precipitable water (right) for the morning (top) and evening (bottom) of February 4. Blue and purple (yellow and orange) indicate below (above) normal values for the period. The maps highlight a very anomalous pattern with a deep low across the Southeast, strong northeasterly flow at 850 mb (westerly flow is normal) and increased moisture from the Eastern Seaboard into Kentucky.

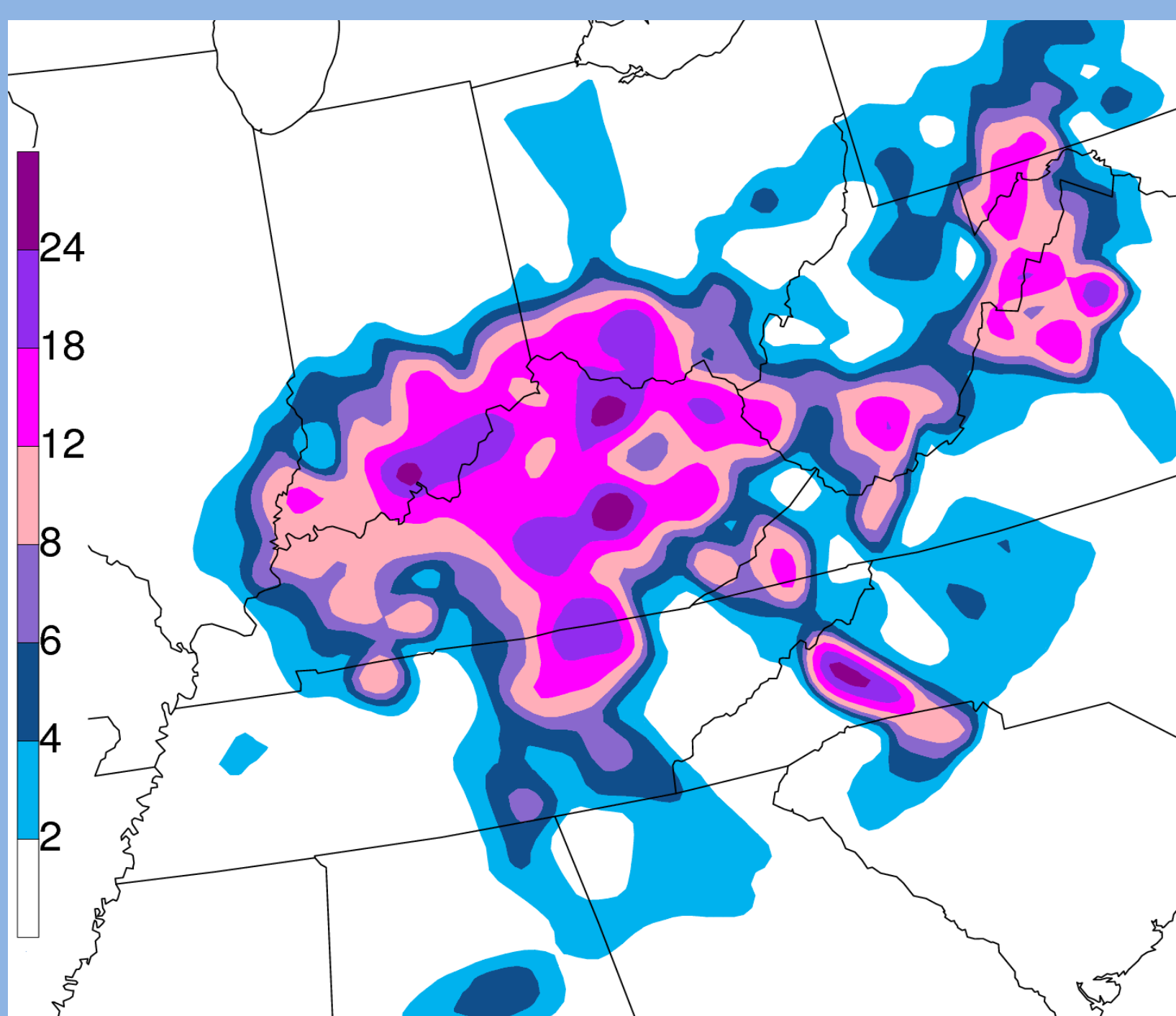
IMPACTS

- Thousands without power in central Kentucky, some for nearly two weeks
- Multiple structures in the Lexington area sustained partial roof collapses due to snow weight
- Over ten million dollars in damage
- Downed trees and power lines made some roads impassible
- Five people died and another five were injured across the state

"It was the worst outage situation in the co-op's 60 year history. More than 42,000 of our 52,000 members were without power at some point; some were out as long as 13 days."

—SKRECC Kentucky Living, April 1998

The slow moving storm's main moisture source came from the Atlantic Ocean, which is not typical of a Kentucky weather system. As the storm made its way up the coast, Kentucky found itself on the northwest side of the strong low, which pulled down colder air from the north to combine with the Atlantic moisture to dump up to two feet of snow for the 4-day period. Temperatures during the event hovered around or just below freezing, which helped keep the snowpack at any one time from reaching its total of nearly two feet in some areas.



Left: Total event snowfall map in inches, with 1-2 feet in parts of Kentucky, southern Indiana, and southwest Ohio. Courtesy of CIPS/Saint Louis University.

Below: A boy in Lexington skiing off a roof. Courtesy of D'Art Lykins, Herald-Leader.



Daily Snowfall	Feb 3	Feb 4	Feb 5	Feb 6	Storm Total
Lexington	0.6"	11.0"* *3rd snowiest day on record	2.2"	3.6"	17.4"
Louisville	0.0"	11.6"* *5th snowiest day on record	6.3"	4.5"	22.4"